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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,908	11/30/2004	Bill J. Pope	6061.1P	7552
7590		09/13/2007		
Daniel P. McCarthy, Esq. Parsons Behle & Latimer Suite 1800 201 South Main Street Salt Lake City, UT 84111			EXAMINER WALKER, AMANDA H	
			ART UNIT 3709	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/727,908

Applicant(s)

POPE ET AL.

Examiner

Amanda H. Walker

Art Unit

3709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 29-67 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct bone fixation portion species discussed in paragraph 0099: species 1a regarding a porous or textured bone in-growth region, species 1b regarding mechanical means for bone fixation, and species 1c regarding adhesion for bone fixation. The species are independent or distinct because they involve different patentably distinct materials and are not obvious variants.

If species 1a were to be elected, this application further contains claims directed to the following patentably distinct species: Species 1a(i) regarding a porous diamond surface discussed in paragraph 0098, Species 1a(ii) regarding a porous metal surface discussed in paragraph 0101, and Species 1a(iii) regarding a porous ceramic or hydroxylapatite surface discussed in paragraph 0101. The species are independent or distinct because they are distinct materials and thus are not obvious variants.

This application contains claims directed to the following patentably distinct first articulation surface species discussed in paragraph 0125: Species 2a regarding an articulation portion made of diamond only, Species 2b regarding an articulation portion made of a diamond compact (with a substrate and a diamond table), and Species 2c regarding an articulation portion containing no diamond. The species are independent or distinct because they constitute extreme variations in materials and are thus not obvious variants.

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This application contains claims directed to the following patentably distinct second articulation surface species discussed in paragraph 0125: Species 3a regarding an articulation portion made of diamond only, Species 3b regarding an articulation purpose made of a diamond compact (with a substrate and a diamond table), and Species 3c regarding an articulation portion containing no diamond. The species are independent or distinct because they constitute extreme variations in materials and are thus not obvious variants.

This application contains claims directed to the following patentably distinct tray species discussed in paragraph 0125: Species 4a regarding a tray with no diamond, and Species 4b regarding a tray including diamond. The species are independent or distinct because Species 4b does not include a key material, and thus they are not obvious variants.

This application contains claims directed to the following patentably distinct diamond feedstock species discussed in paragraph 0142: Species 5a regarding diamond feedstock containing a solvent-catalyst metal, and Species 5b regarding diamond feedstock without a solvent-catalyst metal. The species are independent or distinct because Species 5b does not include a key material, and thus they are not obvious variants.

This application contains claims directed to the following patentably distinct substrate species discussed in paragraph 0143: Species 6a regarding a substrate made of a metal or metal alloy, and Species 6b regarding a substrate made of cemented

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carbide and a metal or metal alloy. The species are independent or distinct because they constitute extreme variations in materials and are thus not obvious variants.

This application contains claims directed to the following patentably distinct substrate/table interface species discussed in paragraph 0144: Species 7a regarding an interface which contains a third material that is a different material than the substrate and the diamond, and Species 7b regarding an interface which does not contain a third material. The species are independent or distinct because Species 7b does not include a key material, and thus they are not obvious variants.

This application contains claims directed to the following patentably distinct compact material species discussed in paragraph 0145: Species 8a regarding a polycrystalline cubic boron nitride compact, and Species 8b regarding a polycrystalline diamond compact. The species are independent or distinct because they constitute extreme variations in materials and are thus not obvious variants.

This application contains claims directed to the following patentably distinct fabrication method species discussed in paragraph 0160: Species 9a regarding sintering, Species 9b regarding chemical vapor deposition, and Species 9c regarding physical vapor deposition. The species are independent or distinct because the different processes create variations in microstructure and thus are not obvious variants.

This application contains claims directed to the following patentably distinct substrate surface topographical feature species discussed in paragraph 281: Species 10a regarding a smooth substrate surface, Species 10b regarding waves or grooves,

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Species 10c regarding arcuate depressions or protrusions, Species 10d regarding polygonal depressions or protrusions, Species 10e regarding cylindrical depressions or protrusions, and Species 10f regarding waffle ridges, and Species 10g regarding a "lip" on either the substrate or the diamond table (as described in paragraphs 298 and 299). The species are independent or distinct because various shapes create distinct patterns and interlocking forces and thus are not obvious variants.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims appear to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a *listing of all claims readable thereon, including any claims subsequently added*. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

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requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda H. Walker whose telephone number is (571)270-3296. The examiner can normally be reached on 9-4, M-Th, EST.

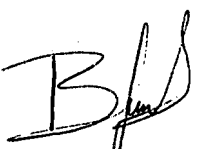
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHW

8-30-07


BETELHEM SHEWAREGED
PRIMARY EXAMINER